

## CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/759,037A

CRF Edit Date: 3/29/05  
Edited by: AK

\_\_\_ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

\_\_\_ Corrected the SEQ ID NO. Sequence numbers edited were:

\_\_\_\_\_

\_\_\_ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

\_\_\_\_\_

\_\_\_ Deleted: / invalid beginning/end-of-file text ; \_\_\_ page numbers

\_\_\_ Inserted mandatory headings/numeric identifiers, specifically:

\_\_\_\_\_

\_\_\_ Moved responses to same line as heading/numeric identifier, specifically:

\_\_\_\_\_

\_\_\_ Other:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



IFW16

## RAW SEQUENCE LISTING

DATE: 03/29/2005

PATENT APPLICATION: US/10/759,037A.

TIME: 12:42:39

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\03292005\J759037A.raw

```

3 <110> APPLICANT: Yosef, Shaul
4     Zemel, Romi
6 <120> TITLE OF INVENTION: HEPATITIS B VIRUS BINDING PROTEINS AND USES THEREOF
8 <130> FILE REFERENCE: 27169
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/759,037A
C--> 10 <141> CURRENT FILING DATE: 2004-01-20
10 <160> NUMBER OF SEQ ID NOS: 14
12 <170> SOFTWARE: PatentIn version 3.3
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 2512
16 <212> TYPE: DNA
17 <213> ORGANISM: Homo sapiens
19 <400> SEQUENCE: 1
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22 tgtgacattg tcccagacgc ttgtaaagggt ggaatgaagt gtgtcaacca ctatggagga      120
24 tacctctgcc ttccgaaaac agcccagatt attgtcaata atgaacagcc tcagcaggaa      180
26 acacaaccag cagaaggaac ctcaggggca accaccgggg ttgtagctgc cagcagcatg      240
28 gcaaccagtg gagtggtgcc cgggggtggt tttgtggcca gtgctgctgc agtcgcaggc      300
30 cctgaaatgc agactggccg aaataacttt gtcattccgc ggaacccagc tgaccctcag      360
32 cgcattccct ccaacccttc ccaccgtatc cagtgtgcag caggctacga gcaaagtga      420
34 cacaacgtgt gccaaagacat agacgagtgct actgcaggga cgcacaactg tagagcagac      480
36 caagtgtgca tcaatttacg gggatccctt gcatgtcagt gccctcctgg atatcagaag      540
38 cgagggggagc agtgcgtaga catagatgaa tgtaccatcc ctccatattg ccaccaaaga      600
40 tgcgtgaata caccaggtc attttattgc cagtgcagtc ctgggtttca attggcagca      660
42 acaactata cctgcgtaga tataaatgaa tgtgatgcca gcaatcaatg tgctcagcag      720
44 tgctacaaca ttcttggttc attcatctgt cagtgcatac aaggatatga gctaagcagt      780
46 gacaggctca actgtgaaga cattgatgaa tgcagaacct caagctacct gtgtcaatat      840
48 caatgtgtca atgaacctgg gaaattctca tgtatgtgcc ccaggggata ccaagtgggtg      900
50 agaagtagaa catgtcaaga tataaatgag tgtgagacca caaatgaatg ccggggaggat      960
52 gaaatgtggt ggaattatca tggcggcttc cgttggtatc cacgaaatcc ttgtcaagat     1020
54 ccctacattc taacaccaga gaaccgatgt gtttgcccag tctcaaatgc catgtgccga     1080
56 gaactgcccc agtcaatagt ctacaaatac atgagcatcc gatctgatag gtctgtgcca     1140
58 tcagacatct tccagatata ggccacaact atttatgcca acaccatcaa tacttttcgg     1200
60 attaaatctg gaaatgaaaa tggagagttc tacctacgac aaacaagtcc tgtaagtgca     1260
62 atgcttgtgc tcgtgaagtc attatcagga ccaagagaac atatcgtgga cctggagatg     1320
64 ctgacagtca gcagtatagg gaccttccgc acaagctctg tgttaagatt gacaataata     1380
66 gtgggggcat tttcatttta gtcttttcta agagtcaacc acaggcattt aagtcagcca     1440
68 aagaatattg ttaccttaaa gcaactatctt atttatagat atatctagtg catctacatc     1500
70 tctatactgt acactcacc ctaacaaaca attacaccat ggtataaagt gggcatttaa     1560
72 tatgtaaaga ttcaaagttt gtctttatta ctatatgtaa attagacatt aatccactaa     1620
74 actggtcttc ttcaagagag ctaagtatac actatctggt gaaacttggg ttcttttcta     1680
76 taaaagtggg accaagcaat gatgatcttc tgtggtgctt aaggaaactt actagagctc     1740
78 cactaacagt ctcataagga ggcagccatc ataaccattg aatagcatgc aagggttaaga     1800

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TIME: 12:42:39

Input Set : A:\PTO.AMC.txt

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80 atgagttttt aactgctttg taagaaaatg gaaaagggtca ataaagatat atttcttttag 1860
82 aaaatgggga tctgccatat ttgtgttggt ttttattttc atatccagcc taaagggtggt 1920
84 tgtttattat atagtaataa atcattgctg tacaacatgc tggtttctgt aggggtatttt 1980
86 taattttgtc agaaatttta gattgtgaat attttgtaaa aaacagtaag caaaatttttc 2040
88 cagaattccc aaaatgaacc agataccccc tagaaaatta tactattgag aaatctatgg 2100
90 ggaggatatg agaaaataaa ttccttctaa accacattgg aactgacctg aagaagcaaa 2160
92 ctcggaataa ataataacat cctgaattc aggcattcac aagatgcaga acaaaatgga 2220
94 taaaagggtat ttcactggag aagttttaat ttctaagtaa aatttaaata ctaacacttc 2280
96 actaatttat aactaaaatt tctcatcttc gtacttgatg ctcacagagg aagaaaatga 2340
98 tgatggtttt tattcctggc atccagagtg acagtgaact taagcaaatt accctcctac 2400
100 ccaattctat ggaatatattt atacgtctcc ttgtttaaaa tctgactgct ttactttgat 2460
102 gtatcatatt tttaaataaa aataaatatt ccttagaag atcactctaa aa 2512
105 <210> SEQ ID NO: 2
106 <211> LENGTH: 387
107 <212> TYPE: PRT
108 <213> ORGANISM: Homo sapiens
110 <400> SEQUENCE: 2
112 Met Ala Thr Ser Gly Val Leu Pro Gly Gly Gly Phe Val Ala Ser Ala
113 1 5 10 15
116 Ala Ala Val Ala Gly Pro Glu Met Gln Thr Gly Arg Asn Asn Phe Val
117 20 25 30
120 Ile Arg Arg Asn Pro Ala Asp Pro Gln Arg Ile Pro Ser Asn Pro Ser
121 35 40 45
124 His Arg Ile Gln Cys Ala Ala Gly Tyr Glu Gln Ser Glu His Asn Val
125 50 55 60
128 Cys Gln Asp Ile Asp Glu Cys Thr Ala Gly Thr His Asn Cys Arg Ala
129 65 70 75 80
132 Asp Gln Val Cys Ile Asn Leu Arg Gly Ser Phe Ala Cys Gln Cys Pro
133 85 90 95
136 Pro Gly Tyr Gln Lys Arg Gly Glu Gln Cys Val Asp Ile Asp Glu Cys
137 100 105 110
140 Thr Ile Pro Pro Tyr Cys His Gln Arg Cys Val Asn Thr Pro Gly Ser
141 115 120 125
144 Phe Tyr Cys Gln Cys Ser Pro Gly Phe Gln Leu Ala Ala Asn Asn Tyr
145 130 135 140
148 Thr Cys Val Asp Ile Asn Glu Cys Asp Ala Ser Asn Gln Cys Ala Gln
149 145 150 155 160
152 Gln Cys Tyr Asn Ile Leu Gly Ser Phe Ile Cys Gln Cys Asn Gln Gly
153 165 170 175
156 Tyr Glu Leu Ser Ser Asp Arg Leu Asn Cys Glu Asp Ile Asp Glu Cys
157 180 185 190
160 Arg Thr Ser Ser Tyr Leu Cys Gln Tyr Gln Cys Val Asn Glu Pro Gly
161 195 200 205
164 Lys Phe Ser Cys Met Cys Pro Gln Gly Tyr Gln Val Val Arg Ser Arg
165 210 215 220
168 Thr Cys Gln Asp Ile Asn Glu Cys Glu Thr Thr Asn Glu Cys Arg Glu
169 225 230 235 240
172 Asp Glu Met Cys Trp Asn Tyr His Gly Gly Phe Arg Cys Tyr Pro Arg
173 245 250 255

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Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\03292005\J759037A.raw

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176 Asn Pro Cys Gln Asp Pro Tyr Ile Leu Thr Pro Glu Asn Arg Cys Val
177          260          265          270
180 Cys Pro Val Ser Asn Ala Met Cys Arg Glu Leu Pro Gln Ser Ile Val
181          275          280          285
184 Tyr Lys Tyr Met Ser Ile Arg Ser Asp Arg Ser Val Pro Ser Asp Ile
185          290          295          300
188 Phe Gln Ile Gln Ala Thr Thr Ile Tyr Ala Asn Thr Ile Asn Thr Phe
189 305          310          315          320
192 Arg Ile Lys Ser Gly Asn Glu Asn Gly Glu Phe Tyr Leu Arg Gln Thr
193          325          330          335
196 Ser Pro Val Ser Ala Met Leu Val Leu Val Lys Ser Leu Ser Gly Pro
197          340          345          350
200 Arg Glu His Ile Val Asp Leu Glu Met Leu Thr Val Ser Ser Ile Gly
201          355          360          365
204 Thr Phe Arg Thr Ser Ser Val Leu Arg Leu Thr Ile Ile Val Gly Pro
205          370          375          380
208 Phe Ser Phe
209 385

```

212 &lt;210&gt; SEQ ID NO: 3

213 &lt;211&gt; LENGTH: 2019

214 &lt;212&gt; TYPE: DNA

215 &lt;213&gt; ORGANISM: Homo sapiens

218 &lt;220&gt; FEATURE:

219 &lt;221&gt; NAME/KEY: misc\_feature

220 &lt;222&gt; LOCATION: (22)..(22)

221 &lt;223&gt; OTHER INFORMATION: n is a, c, g, or t

223 &lt;400&gt; SEQUENCE: 3

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W--> 224 accccggcgc tctccccgtg tncctctccac gactcgctcg gcccctcttg aataaaacac      60
226 ccgcgagccc cgagggccca gaggaggccg acgtgcccga gctcctccgg ggggtcccgc      120
228 cgcaagcttt cttctcgctt tgcattctcc tctcgcgcg tcttgacat gccaggaata      180
230 aaaaggatac tcaactgtac cattctggct ctctgtcttc caagccctgg gaatgcacag      240
232 gcacagtgca cgaatggctt tgacctggat cgccagtcag gacagtgttt agatattgat      300
234 gaatgccgaa ccatccccga ggcctgccga ggagacatga tgtgtgttaa ccaaatggg      360
236 gggatattat gccattcccc gacaaacct gtgtatcgag ggccctactc gaaccctac      420
238 tcgacccccct actcaggtcc gtaccagca gctgcccac cactctcagc tccaaactat      480
240 cccacgatct ccaggcctct tatatgccgc tttggatacc agatggatga aagcaaccaa      540
242 tgtgtggatg tggacgagtg tgcaacagat tcccaccagt gcaacccac ccagatttgc      600
244 atcaatatga agggcgggta cacctgctcc tgcaccgacg gatattggct tttggaaggc      660
246 cagtgccttag acattgatga atgtcgctat ggttactgcc agcagctctg tgcgaatgtt      720
248 cctggatcct attctgtac atgcaacct ggttttacc tcaatgagga tggagggtct      780
250 tgccaagatg tgaacgagtg tgccaccgag aaccctgcg tgcaaacctg cgtcaacacc      840
252 tacggctctt tcatctgccg ctgtgacca ggatatgaac ttgaggaaga tggcgttcat      900
254 tgcagtgata tggacgagtg cagcttctct gagttcctct gccaacatga gtgtgtgaac      960
256 cagcccgcca catacttctg ctctgccct ccaggctaca tctgtctgga tgacaaccga      1020
258 agctgccaaag acatcaacga atgtgagcac aggaaccaca cgtgcaacct gcagcagacg      1080
260 tgctacaatt tacaaggggg cttcaaagtc atcgacccca tccgctgtga ggagccttat      1140
262 ctgaggatca gtgataaccg ctgtatgtgt cctgctgaga accctggctg cagagaccag      1200
264 ccctttacca tctgtaccg ggacatggac gtgggtgtcag gacgtccgt tcccgtgac      1260
266 atcttccaaa tgcaagccac gaccgcctac cctggggcct attacatttt ccagatcaaa      1320

```

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Input Set : A:\PTO.AMC.txt

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```

268 tctggggaatg agggcagaga attttacatg cggcacaacgg gccccatcag tgccaccctg 1380
270 gtgatgacac gccccatcaa agggcccccg gaaatccagc tggacttgga aatgatcact 1440
272 gtcaacactg tcatcaactt cagaggcagc tccgtgatcc gactgcggat atatgtgtcg 1500
274 cagtacccat tctgagcctc gggctggagc ctccgacgct gcctctcatt ggcaccaagg 1560
276 gacaggagaa gagaggaaat aacagagaga atgagagcga cacagacgtt aggcatttcc 1620
278 tgctgaacgt ttccccgaag agtcagcccc gacttctga ctctcacctg tactattgca 1680
280 gacctgtcac cctgcaggac ttgccacccc cagttcctat gacacagtta tcaaaaagta 1740
282 ttatcattgc tcccctgata gaagattgtt ggtgaatttt caaggccttc agtttatttc 1800
284 cactattttc aaagaaaata gattaggttt gcgggggtct gagtctatgt tcaaaagactg 1860
286 tgaacagctt gctgtcactt ctccacctct tccactcctt ctctcactgt gttactgctt 1920
288 tgcaaagacc cggggagctg gcgggggaaac cctggggagt agctagtttg ctttttgcgt 1980
290 acacagaaga aggctatgta aacaaaccac agcaggatc 2019
293 <210> SEQ ID NO: 4
294 <211> LENGTH: 448
295 <212> TYPE: PRT
296 <213> ORGANISM: Homo sapiens
298 <400> SEQUENCE: 4
300 Met Pro Gly Ile Lys Arg Ile Leu Thr Val Thr Ile Leu Ala Leu Cys
301 1 5 10 15
304 Leu Pro Ser Pro Gly Asn Ala Gln Ala Gln Cys Thr Asn Gly Phe Asp
305 20 25 30
308 Leu Asp Arg Gln Ser Gly Gln Cys Leu Asp Ile Asp Glu Cys Arg Thr
309 35 40 45
312 Ile Pro Glu Ala Cys Arg Gly Asp Met Met Cys Val Asn Gln Asn Gly
313 50 55 60
316 Gly Tyr Leu Cys His Ser Arg Thr Asn Pro Val Tyr Arg Gly Pro Tyr
317 65 70 75 80
320 Ser Asn Pro Tyr Ser Thr Pro Tyr Ser Gly Pro Tyr Pro Ala Ala Ala
321 85 90 95
324 Pro Pro Leu Ser Ala Pro Asn Tyr Pro Thr Ile Ser Arg Pro Leu Ile
325 100 105 110
328 Cys Arg Phe Gly Tyr Gln Met Asp Glu Ser Asn Gln Cys Val Asp Val
329 115 120 125
332 Asp Glu Cys Ala Thr Asp Ser His Gln Cys Asn Pro Thr Gln Ile Cys
333 130 135 140
336 Ile Asn Met Lys Gly Gly Tyr Thr Cys Ser Cys Thr Asp Gly Tyr Trp
337 145 150 155 160
340 Leu Leu Glu Gly Gln Cys Leu Asp Ile Asp Glu Cys Arg Tyr Gly Tyr
341 165 170 175
344 Cys Gln Gln Leu Cys Ala Asn Val Pro Gly Ser Tyr Ser Cys Thr Cys
345 180 185 190
348 Asn Pro Gly Phe Thr Leu Asn Glu Asp Gly Arg Ser Cys Gln Asp Val
349 195 200 205
352 Asn Glu Cys Ala Thr Glu Asn Pro Cys Val Gln Thr Cys Val Asn Thr
353 210 215 220
356 Tyr Gly Ser Phe Ile Cys Arg Cys Asp Pro Gly Tyr Glu Leu Glu Glu
357 225 230 235 240
360 Asp Gly Val His Cys Ser Asp Met Asp Glu Cys Ser Phe Ser Glu Phe
361 245 250 255

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TIME: 12:42:39

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\03292005\J759037A.raw

```

364 Leu Cys Gln His Glu Cys Val Asn Gln Pro Gly Thr Tyr Phe Cys Ser
365                260                265                270
368 Cys Pro Pro Gly Tyr Ile Leu Leu Asp Asp Asn Arg Ser Cys Gln Asp
369                275                280                285
372 Ile Asn Glu Cys Glu His Arg Asn His Thr Cys Asn Leu Gln Gln Thr
373                290                295                300
376 Cys Tyr Asn Leu Gln Gly Gly Phe Lys Cys Ile Asp Pro Ile Arg Cys
377 305                310                315                320
380 Glu Glu Pro Tyr Leu Arg Ile Ser Asp Asn Arg Cys Met Cys Pro Ala
381                325                330                335
384 Glu Asn Pro Gly Cys Arg Asp Gln Pro Phe Thr Ile Leu Tyr Arg Asp
385                340                345                350
388 Met Asp Val Val Ser Gly Arg Ser Val Pro Ala Asp Ile Phe Gln Met
389                355                360                365
392 Gln Ala Thr Thr Arg Tyr Pro Gly Ala Tyr Tyr Ile Phe Gln Ile Lys
393                370                375                380
396 Ser Gly Asn Glu Gly Arg Glu Phe Tyr Met Arg Gln Thr Gly Pro Ile
397 385                390                395                400
400 Ser Ala Thr Leu Val Met Thr Arg Pro Ile Lys Gly Pro Arg Glu Ile
401                405                410                415
404 Gln Leu Asp Leu Glu Met Ile Thr Val Asn Thr Val Ile Asn Phe Arg
405                420                425                430
408 Gly Ser Ser Val Ile Arg Leu Arg Ile Tyr Val Ser Gln Tyr Pro Phe
409                435                440                445

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412 &lt;210&gt; SEQ ID NO: 5

413 &lt;211&gt; LENGTH: 1661

414 &lt;212&gt; TYPE: DNA

415 &lt;213&gt; ORGANISM: Homo sapiens

417 &lt;400&gt; SEQUENCE: 5

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418 atgctccccct ggcctcctg cctacccggg tctctactgc tctgggcgct gctactgttg 60
420 ctcttgggat cagcttctcc tcaggattct gaagagcccc acagctacac ggaatgcaca 120
422 gatggctata cccagacagc caactgccgg gatgtcaacg agtgtctgac catccctgag 180
424 gcctgcaagg gggaaatgaa gtgcatcaac cactacgggg gctacttgtg cctgccccgc 240
426 tccgctgccc tcatcaacga cctacacggc gagggacccc cgccaccagt gcctcccgtc 300
428 aacacccaac ccctgcccac aggctatgag cccgacgatc aggacagctg tgtggatgtg 360
430 gacgagtgtg cccaggccct gcacgactgt cgccccagcc aggactgcca taacttgctt 420
432 ggctcctatc agtgcacctg ccctgatggt taccgcaaga tcgggcccga gtgtgtggac 480
434 atagacgagt gccgctaccg ctactgccag caccgctgcg tgaacctgcc tggctccttc 540
436 cgctgcccagt gcgagccggg cttccagctg gggcctaaca accgctcctg tgttgatgtg 600
438 aacgagtgtg acatgggggc cccatgcgag cagcgctgct tcaactccta tgggaccttc 660
440 ctgtgtcgct gccaccaggg ctatgagctg catcgggatg gcttctcctg cagtgatatt 720
442 gatgagtgtg gctactccag ctacctctgt cagtaccgct gcgtcaacga gccaggccgt 780
444 ttctcctgcc actgcccaca gggttaccag ctgctggcca cagcctctg ccaagacatt 840
446 gatgagtgtg agtctggtgc gcaccagtgg tccgaggccc aaacctgtgt caatttccat 900
448 ggggggctacc gctgcgtgga caccaaccgc tgcgtggagc cctacatcca ggtctctgag 960
450 aaccgctgtc tctgcccggc ctccaaccct ctatgtcgag agcagccttc atccattgtg 1020
452 caccgctaca tgaccatcac ctcggaagcg gagagacccg ctgacgtgtt ccagatccag 1080
454 gcgacctccg tctaccccgg tgctacaat gcctttcaga tccgtgctgg aaactcgag 1140
456 ggggactttt acattaggca aatcaacaac gtcagcgcca tgctggtcct cgccccggcg 1200

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/759,037A

DATE: 03/29/2005  
TIME: 12:42:40

Input Set : A:\PTO.AMC.txt  
Output Set: N:\CRF4\03292005\J759037A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 22/

**VERIFICATION SUMMARY**

DATE: 03/29/2005

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TIME: 12:42:40

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\03292005\J759037A.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0